

Appl. No. 10/582,320

Amdt. Dated December 14, 2009

Reply to Office Action of August 19, 2009

REMARKS

Claims 1-22, 24-30 and 32-73 stand rejected. Claims 1, 4, 10, 13, 24, 28, 33-37, 40 and 41 have been amended herein. Further, claims 11, 12, 18-22, 38, 39 and 45-73 have been canceled while new claims 74-103 have been added herein. Therefore, claims 1-10, 13-17, 24-30, 32-37, 40-44 and 74-103 are pending and at issue. Applicants respectfully request reconsideration of the rejections of the claims and allowance of the case.

Claims 1-22, 24-30 and 32-73 stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Otsuki. While Applicants assert that the previously presented set of claims were novel and inventive, the proposed claim amendments have been made to better emphasize the differences between the present invention and the method and apparatus disclosed by Otsuki.

Amended claims 1-10, 13-17, 24-30, 32-37, 40-44 are novel and inventive in light of Otsuki. The independent claims all recite a conventional shipping container, wherein the door of the shipping container is opened and a panel is operatively coupled to the end door opening. The panel has a gas inlet and a gas outlet. A flushing gas is introduced into the container via the gas inlet to flush residual gas from the container. Some of these claims also recite the feature that residual gas is extracted via the gas outlet.

These claims are readily differentiable from Otsuki because:

- The claims recite that the gases pass into and out of the conventional shipping container, whereas Otsuki teaches that the gases are recycled and kept wholly within the container, merely exchanged between internal compartments of the container.

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- An end door of the container is opened during the recited methods, whereas Otsuki teaches the end doors should remain closed.
- A panel with a gas inlet/outlet is attached to the door opening at an end of the container, not internal to and spaced away from the end as taught by Otsuki. The present application does not teach dividing the container internally by the panel. Further, the Office Action's characterization of the partition in Otsuki as a panel coupled to the end door opening of the container, as recited in the present claims, is completely incorrect as the partition in Otsuki is not positioned at the recited location.
- Resultantly, the panel in Otsuki is permanently positioned within the container, at least in the sense that Otsuki does not teach a panel that can practically be attached to every single container that arrives in a port for decontamination and then removed; as is practical in embodiments of the present invention.

The Office Action alleges that extraction of at least some of the residual gas present in the container inherently happens when the door is opened. The claims now all have the feature of the gases flowing through a gas inlet or a gas outlet which are part of the panel attached to the door opening. Otsuki does not disclose or suggest the use of gas inlets or gas outlets located at the door opening. In any case, Otsuki neither discloses or suggest providing a flow of flushing gas into the container via the gas inlet to flush residual gas from the container.

The Office Action alleges in section 2 that Otsuki discloses an absorption means designed to absorb a fumigant. The Office Action supports this allegation by referring to the

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absorption of ethylene within the container. Ethylene, however, is not a fumigant. It is a natural product released by produce. In fact, paragraph 16 of Otsuki states:

carbon dioxide gas circulation channel is equipped with an ethylene removal device, and it is made to make the ethylene generated from agricultural products removed, the operation which ripens and ages agricultural products can be suppressed.

Otsuki does not teach, nor would the person skilled in the art consider, that ethylene is a fumigant. Thus, Otsuki fails to disclose or suggest a fumigant absorption means, as recited in the present claims..

In section 8, the Office Action alleges that Otsuki discloses pipes and couplings to channel the fumigant and gases and such connected pipes and coupling can be inherently decoupled, and thus suggesting claim 28 is invalid in light of Otsuki. Amended claim 28 now recites that the member, which in some embodiments comprises a panel, can be coupled to an end door opening of the container, facilitating the rapid extraction of residual gas. This is certainly neither suggested nor disclosed by Otsuki. Coupling/decoupling the pipes disclosed by Otsuki would be a slow and fiddly task, and cannot be done practically for every container coming into port.

Therefore, for the above reasons, the rejection of claims 1-22, 24-30 and 32-73 should be withdrawn and the claims allowed.

Applicants have also added new claims 74 to 103 which are novel and inventive in light of the cited art. These claims now positively recite pumping a flow of a flushing gas into the container via the end door opening to flush residual gas from the container. Some of these claims also recite pumping at least some of the residual gas present into the container out of the

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container via the end or opening. Pumping is an active process and thus can be readily differentiated from the passive process of residual gas diffusing out of a container when the end doors are opened, such as alleged by the Office Action as occurring in Otsuki. It will be appreciated that diffusion is an inherently slow process – unacceptably and impractically slow, in contrast to the present invention which takes a much more active approach to the extraction and flushing steps (pumping) resulting in much faster residual gas extraction. Therefore, new claims 74-103 are also allowable.

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CONCLUSION

Should any formalities remain which may be addressed by Examiner amendments, the examiner is requested to contact by phone the undersigned attorney to expedite the prosecution of the present application.

If any fees are due in connection with this application, the Patent Office is authorized to deduct the fees from Deposit Account No. 19-1351 as required. If such withdrawal is made, please indicate the attorney docket number (37388-405800) on the account statement.

Respectfully submitted,

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